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**UTILITY  
PATENT APPLICATION  
TRANSMITTAL**

(Only for new nonprovisional applications under 37 CFR 1.53(b))

|  |               |             |    |
|--|---------------|-------------|----|
| Attorney Docket No.                            | 2807.2.20.6   | Total Pages | 75 |
| First Named Inventor or Application Identifier |               |             |    |
| John N. Hart                                   |               |             |    |
| Express Mail Label No.                         | EL751290425US |             |    |

**APPLICATION ELEMENTS**

See MPEP chapter 600 concerning utility patent application contents.

1. ☒ Fee Transmittal Form  
(Submit an original, and a duplicate for fee processing)
2. ☒ Applicant claims small entity status See 37 CFR 1.27
3. ☒ Specification Total Pages **52**  
(preferred arrangement set forth below)
  - Descriptive title of the Invention
  - Cross References to Related Application
  - Statement Regarding Fed sponsored R & D
  - Reference to Microfiche Appendix
  - Background of the Invention
  - Brief Summary of the Invention
  - Brief Description of the Drawings (if filed)
  - Detailed Description
  - Claim(s)
  - Abstract of the Disclosure
4. ☒ Drawing(s) (35 USC 113) [Total Sheets **17**]
5. Oath or Declaration [Total Pages **1**]
  - a. ☒ Newly executed (original or copy)
  - b. ☐ Copy from a prior application (37 CFR 1.63(d))  
(for continuation /divisional with Box 17 completed)  
[Note Box 5 below]
  - i. ☐ **DELETION OF INVENTOR(S)**  
Signed statement attached deleting inventor(s)  
named in prior application, see 37 CFR 1.63(d)(2)  
and 1.33(b).
6. ☐ Incorporation by Reference (useable if Box 4b is checked)  
The entire disclosure of the prior application, from which a copy  
of the oath or declaration is supplied under Box 4b is considered  
as being part of the disclosure of the accompanying application  
and is hereby incorporated by reference therein.

**Assistant Commissioner for Patents**ADDRESS TO: **Box Patent Application  
Washington, DC 20231**

7. ☐ Microfiche Computer Program (Appendix)
8. Nucleotide and/or Amino Acid Sequence Submission (if  
applicable, all necessary)
  - a. ☐ Computer Readable Copy
  - b. ☐ Paper Copy (identical to computer copy)
  - c. ☐ Statement verifying identify of above copies

**ACCOMPANYING APPLICATION PARTS**

9. ☒ Assignment Papers (cover sheet & document(s))
10. ☐ 37 CFR 3.73(b) Statement ☐ Power of Attorney  
(when there is an assignee)
11. ☐ English Translation Document (if applicable)
12. ☐ Information Disclosure ☐ Copies of IDS  
Statement (IDS)/PTO-1449 Citations
13. ☐ Preliminary Amendment
14. ☒ Return Receipt Postcard (MPEP 503)  
(Should be specifically itemized)
15. ☐ Small Entity ☐ Statement filed in prior application,  
Statement(s) Status still proper and desired
16. ☐ Certified Copy of Priority Document(s)  
(if foreign priority is claimed)
17. ☒ Other: Express Mail Certificate

18. If a **CONTINUING APPLICATION**, check appropriate box and supply the requisite information:☐ Continuation ☐ Divisional ☒ Continuation-in-part (CIP) of prior application No. **09/810,879****18. CORRESPONDENCE ADDRESS**☒ Customer Number or Bar Code Labelor ☐ Correspondence address below**28049**

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|--|----------|--------------------------|----------------|
| <h1 style="margin: 0;">FEE TRANSMITTAL</h1> <p style="margin: 10px 0;"><i>Note: Effective October 1, 1997.<br/>Patent fees are subject to annual revision.</i></p> |          | <b>Complete If Known</b> |                |
|  |          | Application Number       |                |
|  |          | Filing Date              | August 3, 2001 |
|  |          | First Named Inventor     | John N. Hait   |
|  |          | Group Art Unit           |                |
|  |          | Examiner Name            |                |
| TOTAL AMOUNT OF PAYMENT  | \$395.00 | Attorney Docket Number   | 2807.2.20.6    |

| METHOD OF PAYMENT (check one)  | FEE CALCULATION (continued)  |              |                |  |                 |                 |          |          |          |          |          |     |     |     |                    |                                     |     |     |     |     |                   |  |     |     |     |     |                  |                           |     |     |      |     |                    |  |     |     |      |     |                        |  |                     |     |       |     |       |   |  |     |       |                |          |  |          |     |     |     |             |   |   |     |     |                      |     |  |  |     |              |     |              |   |                 |          |          |          |          |  |     |     |     |     |                        |                  |     |     |     |     |                                   |  |     |     |     |     |                          |                          |     |     |      |     |   |   |     |     |     |     |   |                                  |                     |     |      |     |     |                                    |  |     |      |     |     |                   |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |   |  |     |     |     |     |   |  |     |    |     |    |  |    |     |     |     |     |   |  |     |     |     |     |  |  |                           |  |  |  |  |  |                           |  |  |  |  |  |
|--|--|--------------|----------------|--|-----------------|-----------------|----------|----------|----------|----------|----------|-----|-----|-----|--------------------|-------------------------------------|-----|-----|-----|-----|-------------------|--|-----|-----|-----|-----|------------------|---------------------------|-----|-----|------|-----|--------------------|--|-----|-----|------|-----|------------------------|--|---------------------|-----|-------|-----|-------|---|--|-----|-------|----------------|----------|--|----------|-----|-----|-----|-------------|---|---|-----|-----|----------------------|-----|--|--|-----|--------------|-----|--------------|---|-----------------|----------|----------|----------|----------|--|-----|-----|-----|-----|------------------------|------------------|-----|-----|-----|-----|-----------------------------------|--|-----|-----|-----|-----|--------------------------|--------------------------|-----|-----|------|-----|---|---|-----|-----|-----|-----|---|----------------------------------|---------------------|-----|------|-----|-----|------------------------------------|--|-----|------|-----|-----|-------------------|--|-----|-----|-----|-----|------------------|--|-----|-----|-----|-----|-----------------|--|-----|-----|-----|-----|-------------------------------|--|-----|----|-----|----|---|--|-----|-----|-----|-----|---|--|-----|----|-----|----|--|----|-----|-----|-----|-----|---|--|-----|-----|-----|-----|--|--|---------------------------|--|--|--|--|--|---------------------------|--|--|--|--|--|
| <p>1. <input type="checkbox"/> The Commissioner is hereby authorized to charge indicated fees and credit any over payments to:</p> <p>Deposit Account Number <span style="border: 1px solid black; display: inline-block; width: 150px; height: 1.2em; vertical-align: middle;"></span></p> <p>Deposit Account Name <span style="border: 1px solid black; display: inline-block; width: 150px; height: 1.2em; vertical-align: middle;"></span></p> <p><input type="checkbox"/> Charge Any Additional Fee Required Under 37 CFR 1.16 and 1.17      <input type="checkbox"/> Charge the Issue Fee In 37 CFR at the Mailing of the Notice of Allowance</p> <p>2. <input checked="" type="checkbox"/> Payment Enclosed:</p> <p style="margin-left: 20px;"><input checked="" type="checkbox"/> Check    <input type="checkbox"/> Money Order    <input type="checkbox"/> Other</p>  | <h3>3. ADDITIONAL FEES</h3> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2">Large Entity</th> <th colspan="2">Small Entity</th> <th rowspan="2">Fee Description</th> <th rowspan="2">Fee Paid</th> </tr> <tr> <th>Fee Code</th> <th>Fee (\$)</th> <th>Fee Code</th> <th>Fee (\$)</th> </tr> </thead> <tbody> <tr><td>105</td><td>130</td><td>205</td><td>65</td><td>Surcharge - late filing fee or oath</td><td></td></tr> <tr><td>127</td><td>50</td><td>227</td><td>25</td><td>Surcharge - late provisional filing fee or cover sheet</td><td></td></tr> <tr><td>139</td><td>130</td><td>139</td><td>130</td><td>Non-English specification</td><td></td></tr> <tr><td>147</td><td>2520</td><td>147</td><td>2520</td><td>For filing a request for reexamination</td><td></td></tr> <tr><td>112</td><td>920*</td><td>112</td><td>920*</td><td>Requesting publication of SIR prior to Examiner action</td><td></td></tr> <tr><td>113</td><td>1840*</td><td>113</td><td>1840*</td><td>Requesting publication of SIR after Examiner action</td><td></td></tr> <tr><td>115</td><td>110</td><td>215</td><td>55</td><td>Extension for reply within first month</td><td></td></tr> <tr><td>116</td><td>390</td><td>216</td><td>195</td><td>Extension for reply within second month</td><td></td></tr> <tr><td>117</td><td>890</td><td>217</td><td>445</td><td>Extension for reply within third month</td><td></td></tr> <tr><td>118</td><td>1390</td><td>218</td><td>695</td><td>Extension for reply within fourth month</td><td></td></tr> <tr><td>128</td><td>1890</td><td>228</td><td>945</td><td>Extension for reply within fifth month</td><td></td></tr> <tr><td>119</td><td>310</td><td>219</td><td>155</td><td>Notice of Appeal</td><td></td></tr> <tr><td>120</td><td>310</td><td>220</td><td>155</td><td>Filing a brief in support of an appeal</td><td></td></tr> <tr><td>121</td><td>270</td><td>221</td><td>135</td><td>Request for oral hearing</td><td></td></tr> <tr><td>138</td><td>1510</td><td>138</td><td>1510</td><td>Petition to institute a public use proceeding</td><td></td></tr> <tr><td>140</td><td>110</td><td>240</td><td>55</td><td>Petition to revive - intentional</td><td></td></tr> <tr><td>141</td><td>1240</td><td>241</td><td>620</td><td>Petition to revive - unintentional</td><td></td></tr> <tr><td>142</td><td>1240</td><td>242</td><td>620</td><td>Utility issue fee</td><td></td></tr> <tr><td>143</td><td>440</td><td>243</td><td>220</td><td>Design issue fee</td><td></td></tr> <tr><td>144</td><td>600</td><td>244</td><td>300</td><td>Plant issue fee</td><td></td></tr> <tr><td>122</td><td>130</td><td>122</td><td>130</td><td>Petitions to the Commissioner</td><td></td></tr> <tr><td>123</td><td>50</td><td>123</td><td>50</td><td>Petitions related to provisional applications</td><td></td></tr> <tr><td>126</td><td>240</td><td>126</td><td>240</td><td>Submission of Information Disclosure Stmt</td><td></td></tr> <tr><td>581</td><td>40</td><td>581</td><td>40</td><td>Recording each patent assignment per property (times number of properties)</td><td>40</td></tr> <tr><td>146</td><td>710</td><td>246</td><td>355</td><td>Filing a submission after final rejection (37 CFR 1.129(a))</td><td></td></tr> <tr><td>149</td><td>710</td><td>249</td><td>355</td><td>For each additional invention to be examined (37 CFR 1.129(b))</td><td></td></tr> <tr><td colspan="5">Other fee (specify) _____</td><td></td></tr> <tr><td colspan="5">Other fee (specify) _____</td><td></td></tr> </tbody> </table> | Large Entity |                | Small Entity   |                 | Fee Description | Fee Paid | Fee Code | Fee (\$) | Fee Code | Fee (\$) | 105 | 130 | 205 | 65                 | Surcharge - late filing fee or oath |     | 127 | 50  | 227 | 25                | Surcharge - late provisional filing fee or cover sheet |     | 139 | 130 | 139 | 130              | Non-English specification |     | 147 | 2520 | 147 | 2520               | For filing a request for reexamination |     | 112 | 920* | 112 | 920*                   | Requesting publication of SIR prior to Examiner action |                     | 113 | 1840* | 113 | 1840* | Requesting publication of SIR after Examiner action |  | 115 | 110   | 215            | 55       | Extension for reply within first month |          | 116 | 390 | 216 | 195         | Extension for reply within second month |   | 117 | 890 | 217                  | 445 | Extension for reply within third month |  | 118 | 1390         | 218 | 695          | Extension for reply within fourth month |                 | 128      | 1890     | 228      | 945      | Extension for reply within fifth month |     | 119 | 310 | 219 | 155                    | Notice of Appeal |     | 120 | 310 | 220 | 155                               | Filing a brief in support of an appeal |     | 121 | 270 | 221 | 135                      | Request for oral hearing |     | 138 | 1510 | 138 | 1510  | Petition to institute a public use proceeding |     | 140 | 110 | 240 | 55  | Petition to revive - intentional |                     | 141 | 1240 | 241 | 620 | Petition to revive - unintentional |  | 142 | 1240 | 242 | 620 | Utility issue fee |  | 143 | 440 | 243 | 220 | Design issue fee |  | 144 | 600 | 244 | 300 | Plant issue fee |  | 122 | 130 | 122 | 130 | Petitions to the Commissioner |  | 123 | 50 | 123 | 50 | Petitions related to provisional applications |  | 126 | 240 | 126 | 240 | Submission of Information Disclosure Stmt |  | 581 | 40 | 581 | 40 | Recording each patent assignment per property (times number of properties) | 40 | 146 | 710 | 246 | 355 | Filing a submission after final rejection (37 CFR 1.129(a)) |  | 149 | 710 | 249 | 355 | For each additional invention to be examined (37 CFR 1.129(b)) |  | Other fee (specify) _____ |  |  |  |  |  | Other fee (specify) _____ |  |  |  |  |  |
| Large Entity   |  | Small Entity |                | Fee Description  | Fee Paid        |                 |          |          |          |          |          |     |     |     |                    |                                     |     |     |     |     |                   |  |     |     |     |     |                  |                           |     |     |      |     |                    |  |     |     |      |     |                        |  |                     |     |       |     |       |   |  |     |       |                |          |  |          |     |     |     |             |   |   |     |     |                      |     |  |  |     |              |     |              |   |                 |          |          |          |          |  |     |     |     |     |                        |                  |     |     |     |     |                                   |  |     |     |     |     |                          |                          |     |     |      |     |   |   |     |     |     |     |   |                                  |                     |     |      |     |     |                                    |  |     |      |     |     |                   |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |   |  |     |     |     |     |   |  |     |    |     |    |  |    |     |     |     |     |   |  |     |     |     |     |  |  |                           |  |  |  |  |  |                           |  |  |  |  |  |
| Fee Code   | Fee (\$)   | Fee Code     | Fee (\$)       |  |                 |                 |          |          |          |          |          |     |     |     |                    |                                     |     |     |     |     |                   |  |     |     |     |     |                  |                           |     |     |      |     |                    |  |     |     |      |     |                        |  |                     |     |       |     |       |   |  |     |       |                |          |  |          |     |     |     |             |   |   |     |     |                      |     |  |  |     |              |     |              |   |                 |          |          |          |          |  |     |     |     |     |                        |                  |     |     |     |     |                                   |  |     |     |     |     |                          |                          |     |     |      |     |   |   |     |     |     |     |   |                                  |                     |     |      |     |     |                                    |  |     |      |     |     |                   |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |   |  |     |     |     |     |   |  |     |    |     |    |  |    |     |     |     |     |   |  |     |     |     |     |  |  |                           |  |  |  |  |  |                           |  |  |  |  |  |
| 105  | 130  | 205          | 65             | Surcharge - late filing fee or oath  |                 |                 |          |          |          |          |          |     |     |     |                    |                                     |     |     |     |     |                   |  |     |     |     |     |                  |                           |     |     |      |     |                    |  |     |     |      |     |                        |  |                     |     |       |     |       |   |  |     |       |                |          |  |          |     |     |     |             |   |   |     |     |                      |     |  |  |     |              |     |              |   |                 |          |          |          |          |  |     |     |     |     |                        |                  |     |     |     |     |                                   |  |     |     |     |     |                          |                          |     |     |      |     |   |   |     |     |     |     |   |                                  |                     |     |      |     |     |                                    |  |     |      |     |     |                   |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |   |  |     |     |     |     |   |  |     |    |     |    |  |    |     |     |     |     |   |  |     |     |     |     |  |  |                           |  |  |  |  |  |                           |  |  |  |  |  |
| 127  | 50   | 227          | 25             | Surcharge - late provisional filing fee or cover sheet                     |                 |                 |          |          |          |          |          |     |     |     |                    |                                     |     |     |     |     |                   |  |     |     |     |     |                  |                           |     |     |      |     |                    |  |     |     |      |     |                        |  |                     |     |       |     |       |   |  |     |       |                |          |  |          |     |     |     |             |   |   |     |     |                      |     |  |  |     |              |     |              |   |                 |          |          |          |          |  |     |     |     |     |                        |                  |     |     |     |     |                                   |  |     |     |     |     |                          |                          |     |     |      |     |   |   |     |     |     |     |   |                                  |                     |     |      |     |     |                                    |  |     |      |     |     |                   |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |   |  |     |     |     |     |   |  |     |    |     |    |  |    |     |     |     |     |   |  |     |     |     |     |  |  |                           |  |  |  |  |  |                           |  |  |  |  |  |
| 139  | 130  | 139          | 130            | Non-English specification  |                 |                 |          |          |          |          |          |     |     |     |                    |                                     |     |     |     |     |                   |  |     |     |     |     |                  |                           |     |     |      |     |                    |  |     |     |      |     |                        |  |                     |     |       |     |       |   |  |     |       |                |          |  |          |     |     |     |             |   |   |     |     |                      |     |  |  |     |              |     |              |   |                 |          |          |          |          |  |     |     |     |     |                        |                  |     |     |     |     |                                   |  |     |     |     |     |                          |                          |     |     |      |     |   |   |     |     |     |     |   |                                  |                     |     |      |     |     |                                    |  |     |      |     |     |                   |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |   |  |     |     |     |     |   |  |     |    |     |    |  |    |     |     |     |     |   |  |     |     |     |     |  |  |                           |  |  |  |  |  |                           |  |  |  |  |  |
| 147  | 2520   | 147          | 2520           | For filing a request for reexamination                                     |                 |                 |          |          |          |          |          |     |     |     |                    |                                     |     |     |     |     |                   |  |     |     |     |     |                  |                           |     |     |      |     |                    |  |     |     |      |     |                        |  |                     |     |       |     |       |   |  |     |       |                |          |  |          |     |     |     |             |   |   |     |     |                      |     |  |  |     |              |     |              |   |                 |          |          |          |          |  |     |     |     |     |                        |                  |     |     |     |     |                                   |  |     |     |     |     |                          |                          |     |     |      |     |   |   |     |     |     |     |   |                                  |                     |     |      |     |     |                                    |  |     |      |     |     |                   |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |   |  |     |     |     |     |   |  |     |    |     |    |  |    |     |     |     |     |   |  |     |     |     |     |  |  |                           |  |  |  |  |  |                           |  |  |  |  |  |
| 112  | 920*   | 112          | 920*           | Requesting publication of SIR prior to Examiner action                     |                 |                 |          |          |          |          |          |     |     |     |                    |                                     |     |     |     |     |                   |  |     |     |     |     |                  |                           |     |     |      |     |                    |  |     |     |      |     |                        |  |                     |     |       |     |       |   |  |     |       |                |          |  |          |     |     |     |             |   |   |     |     |                      |     |  |  |     |              |     |              |   |                 |          |          |          |          |  |     |     |     |     |                        |                  |     |     |     |     |                                   |  |     |     |     |     |                          |                          |     |     |      |     |   |   |     |     |     |     |   |                                  |                     |     |      |     |     |                                    |  |     |      |     |     |                   |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |   |  |     |     |     |     |   |  |     |    |     |    |  |    |     |     |     |     |   |  |     |     |     |     |  |  |                           |  |  |  |  |  |                           |  |  |  |  |  |
| 113  | 1840*  | 113          | 1840*          | Requesting publication of SIR after Examiner action                        |                 |                 |          |          |          |          |          |     |     |     |                    |                                     |     |     |     |     |                   |  |     |     |     |     |                  |                           |     |     |      |     |                    |  |     |     |      |     |                        |  |                     |     |       |     |       |   |  |     |       |                |          |  |          |     |     |     |             |   |   |     |     |                      |     |  |  |     |              |     |              |   |                 |          |          |          |          |  |     |     |     |     |                        |                  |     |     |     |     |                                   |  |     |     |     |     |                          |                          |     |     |      |     |   |   |     |     |     |     |   |                                  |                     |     |      |     |     |                                    |  |     |      |     |     |                   |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |   |  |     |     |     |     |   |  |     |    |     |    |  |    |     |     |     |     |   |  |     |     |     |     |  |  |                           |  |  |  |  |  |                           |  |  |  |  |  |
| 115  | 110  | 215          | 55             | Extension for reply within first month                                     |                 |                 |          |          |          |          |          |     |     |     |                    |                                     |     |     |     |     |                   |  |     |     |     |     |                  |                           |     |     |      |     |                    |  |     |     |      |     |                        |  |                     |     |       |     |       |   |  |     |       |                |          |  |          |     |     |     |             |   |   |     |     |                      |     |  |  |     |              |     |              |   |                 |          |          |          |          |  |     |     |     |     |                        |                  |     |     |     |     |                                   |  |     |     |     |     |                          |                          |     |     |      |     |   |   |     |     |     |     |   |                                  |                     |     |      |     |     |                                    |  |     |      |     |     |                   |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |   |  |     |     |     |     |   |  |     |    |     |    |  |    |     |     |     |     |   |  |     |     |     |     |  |  |                           |  |  |  |  |  |                           |  |  |  |  |  |
| 116  | 390  | 216          | 195            | Extension for reply within second month                                    |                 |                 |          |          |          |          |          |     |     |     |                    |                                     |     |     |     |     |                   |  |     |     |     |     |                  |                           |     |     |      |     |                    |  |     |     |      |     |                        |  |                     |     |       |     |       |   |  |     |       |                |          |  |          |     |     |     |             |   |   |     |     |                      |     |  |  |     |              |     |              |   |                 |          |          |          |          |  |     |     |     |     |                        |                  |     |     |     |     |                                   |  |     |     |     |     |                          |                          |     |     |      |     |   |   |     |     |     |     |   |                                  |                     |     |      |     |     |                                    |  |     |      |     |     |                   |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |   |  |     |     |     |     |   |  |     |    |     |    |  |    |     |     |     |     |   |  |     |     |     |     |  |  |                           |  |  |  |  |  |                           |  |  |  |  |  |
| 117  | 890  | 217          | 445            | Extension for reply within third month                                     |                 |                 |          |          |          |          |          |     |     |     |                    |                                     |     |     |     |     |                   |  |     |     |     |     |                  |                           |     |     |      |     |                    |  |     |     |      |     |                        |  |                     |     |       |     |       |   |  |     |       |                |          |  |          |     |     |     |             |   |   |     |     |                      |     |  |  |     |              |     |              |   |                 |          |          |          |          |  |     |     |     |     |                        |                  |     |     |     |     |                                   |  |     |     |     |     |                          |                          |     |     |      |     |   |   |     |     |     |     |   |                                  |                     |     |      |     |     |                                    |  |     |      |     |     |                   |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |   |  |     |     |     |     |   |  |     |    |     |    |  |    |     |     |     |     |   |  |     |     |     |     |  |  |                           |  |  |  |  |  |                           |  |  |  |  |  |
| 118  | 1390   | 218          | 695            | Extension for reply within fourth month                                    |                 |                 |          |          |          |          |          |     |     |     |                    |                                     |     |     |     |     |                   |  |     |     |     |     |                  |                           |     |     |      |     |                    |  |     |     |      |     |                        |  |                     |     |       |     |       |   |  |     |       |                |          |  |          |     |     |     |             |   |   |     |     |                      |     |  |  |     |              |     |              |   |                 |          |          |          |          |  |     |     |     |     |                        |                  |     |     |     |     |                                   |  |     |     |     |     |                          |                          |     |     |      |     |   |   |     |     |     |     |   |                                  |                     |     |      |     |     |                                    |  |     |      |     |     |                   |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |   |  |     |     |     |     |   |  |     |    |     |    |  |    |     |     |     |     |   |  |     |     |     |     |  |  |                           |  |  |  |  |  |                           |  |  |  |  |  |
| 128  | 1890   | 228          | 945            | Extension for reply within fifth month                                     |                 |                 |          |          |          |          |          |     |     |     |                    |                                     |     |     |     |     |                   |  |     |     |     |     |                  |                           |     |     |      |     |                    |  |     |     |      |     |                        |  |                     |     |       |     |       |   |  |     |       |                |          |  |          |     |     |     |             |   |   |     |     |                      |     |  |  |     |              |     |              |   |                 |          |          |          |          |  |     |     |     |     |                        |                  |     |     |     |     |                                   |  |     |     |     |     |                          |                          |     |     |      |     |   |   |     |     |     |     |   |                                  |                     |     |      |     |     |                                    |  |     |      |     |     |                   |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |   |  |     |     |     |     |   |  |     |    |     |    |  |    |     |     |     |     |   |  |     |     |     |     |  |  |                           |  |  |  |  |  |                           |  |  |  |  |  |
| 119  | 310  | 219          | 155            | Notice of Appeal   |                 |                 |          |          |          |          |          |     |     |     |                    |                                     |     |     |     |     |                   |  |     |     |     |     |                  |                           |     |     |      |     |                    |  |     |     |      |     |                        |  |                     |     |       |     |       |   |  |     |       |                |          |  |          |     |     |     |             |   |   |     |     |                      |     |  |  |     |              |     |              |   |                 |          |          |          |          |  |     |     |     |     |                        |                  |     |     |     |     |                                   |  |     |     |     |     |                          |                          |     |     |      |     |   |   |     |     |     |     |   |                                  |                     |     |      |     |     |                                    |  |     |      |     |     |                   |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |   |  |     |     |     |     |   |  |     |    |     |    |  |    |     |     |     |     |   |  |     |     |     |     |  |  |                           |  |  |  |  |  |                           |  |  |  |  |  |
| 120  | 310  | 220          | 155            | Filing a brief in support of an appeal                                     |                 |                 |          |          |          |          |          |     |     |     |                    |                                     |     |     |     |     |                   |  |     |     |     |     |                  |                           |     |     |      |     |                    |  |     |     |      |     |                        |  |                     |     |       |     |       |   |  |     |       |                |          |  |          |     |     |     |             |   |   |     |     |                      |     |  |  |     |              |     |              |   |                 |          |          |          |          |  |     |     |     |     |                        |                  |     |     |     |     |                                   |  |     |     |     |     |                          |                          |     |     |      |     |   |   |     |     |     |     |   |                                  |                     |     |      |     |     |                                    |  |     |      |     |     |                   |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |   |  |     |     |     |     |   |  |     |    |     |    |  |    |     |     |     |     |   |  |     |     |     |     |  |  |                           |  |  |  |  |  |                           |  |  |  |  |  |
| 121  | 270  | 221          | 135            | Request for oral hearing   |                 |                 |          |          |          |          |          |     |     |     |                    |                                     |     |     |     |     |                   |  |     |     |     |     |                  |                           |     |     |      |     |                    |  |     |     |      |     |                        |  |                     |     |       |     |       |   |  |     |       |                |          |  |          |     |     |     |             |   |   |     |     |                      |     |  |  |     |              |     |              |   |                 |          |          |          |          |  |     |     |     |     |                        |                  |     |     |     |     |                                   |  |     |     |     |     |                          |                          |     |     |      |     |   |   |     |     |     |     |   |                                  |                     |     |      |     |     |                                    |  |     |      |     |     |                   |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |   |  |     |     |     |     |   |  |     |    |     |    |  |    |     |     |     |     |   |  |     |     |     |     |  |  |                           |  |  |  |  |  |                           |  |  |  |  |  |
| 138  | 1510   | 138          | 1510           | Petition to institute a public use proceeding                              |                 |                 |          |          |          |          |          |     |     |     |                    |                                     |     |     |     |     |                   |  |     |     |     |     |                  |                           |     |     |      |     |                    |  |     |     |      |     |                        |  |                     |     |       |     |       |   |  |     |       |                |          |  |          |     |     |     |             |   |   |     |     |                      |     |  |  |     |              |     |              |   |                 |          |          |          |          |  |     |     |     |     |                        |                  |     |     |     |     |                                   |  |     |     |     |     |                          |                          |     |     |      |     |   |   |     |     |     |     |   |                                  |                     |     |      |     |     |                                    |  |     |      |     |     |                   |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |   |  |     |     |     |     |   |  |     |    |     |    |  |    |     |     |     |     |   |  |     |     |     |     |  |  |                           |  |  |  |  |  |                           |  |  |  |  |  |
| 140  | 110  | 240          | 55             | Petition to revive - intentional   |                 |                 |          |          |          |          |          |     |     |     |                    |                                     |     |     |     |     |                   |  |     |     |     |     |                  |                           |     |     |      |     |                    |  |     |     |      |     |                        |  |                     |     |       |     |       |   |  |     |       |                |          |  |          |     |     |     |             |   |   |     |     |                      |     |  |  |     |              |     |              |   |                 |          |          |          |          |  |     |     |     |     |                        |                  |     |     |     |     |                                   |  |     |     |     |     |                          |                          |     |     |      |     |   |   |     |     |     |     |   |                                  |                     |     |      |     |     |                                    |  |     |      |     |     |                   |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |   |  |     |     |     |     |   |  |     |    |     |    |  |    |     |     |     |     |   |  |     |     |     |     |  |  |                           |  |  |  |  |  |                           |  |  |  |  |  |
| 141  | 1240   | 241          | 620            | Petition to revive - unintentional   |                 |                 |          |          |          |          |          |     |     |     |                    |                                     |     |     |     |     |                   |  |     |     |     |     |                  |                           |     |     |      |     |                    |  |     |     |      |     |                        |  |                     |     |       |     |       |   |  |     |       |                |          |  |          |     |     |     |             |   |   |     |     |                      |     |  |  |     |              |     |              |   |                 |          |          |          |          |  |     |     |     |     |                        |                  |     |     |     |     |                                   |  |     |     |     |     |                          |                          |     |     |      |     |   |   |     |     |     |     |   |                                  |                     |     |      |     |     |                                    |  |     |      |     |     |                   |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |   |  |     |     |     |     |   |  |     |    |     |    |  |    |     |     |     |     |   |  |     |     |     |     |  |  |                           |  |  |  |  |  |                           |  |  |  |  |  |
| 142  | 1240   | 242          | 620            | Utility issue fee  |                 |                 |          |          |          |          |          |     |     |     |                    |                                     |     |     |     |     |                   |  |     |     |     |     |                  |                           |     |     |      |     |                    |  |     |     |      |     |                        |  |                     |     |       |     |       |   |  |     |       |                |          |  |          |     |     |     |             |   |   |     |     |                      |     |  |  |     |              |     |              |   |                 |          |          |          |          |  |     |     |     |     |                        |                  |     |     |     |     |                                   |  |     |     |     |     |                          |                          |     |     |      |     |   |   |     |     |     |     |   |                                  |                     |     |      |     |     |                                    |  |     |      |     |     |                   |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |   |  |     |     |     |     |   |  |     |    |     |    |  |    |     |     |     |     |   |  |     |     |     |     |  |  |                           |  |  |  |  |  |                           |  |  |  |  |  |
| 143  | 440  | 243          | 220            | Design issue fee   |                 |                 |          |          |          |          |          |     |     |     |                    |                                     |     |     |     |     |                   |  |     |     |     |     |                  |                           |     |     |      |     |                    |  |     |     |      |     |                        |  |                     |     |       |     |       |   |  |     |       |                |          |  |          |     |     |     |             |   |   |     |     |                      |     |  |  |     |              |     |              |   |                 |          |          |          |          |  |     |     |     |     |                        |                  |     |     |     |     |                                   |  |     |     |     |     |                          |                          |     |     |      |     |   |   |     |     |     |     |   |                                  |                     |     |      |     |     |                                    |  |     |      |     |     |                   |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |   |  |     |     |     |     |   |  |     |    |     |    |  |    |     |     |     |     |   |  |     |     |     |     |  |  |                           |  |  |  |  |  |                           |  |  |  |  |  |
| 144  | 600  | 244          | 300            | Plant issue fee  |                 |                 |          |          |          |          |          |     |     |     |                    |                                     |     |     |     |     |                   |  |     |     |     |     |                  |                           |     |     |      |     |                    |  |     |     |      |     |                        |  |                     |     |       |     |       |   |  |     |       |                |          |  |          |     |     |     |             |   |   |     |     |                      |     |  |  |     |              |     |              |   |                 |          |          |          |          |  |     |     |     |     |                        |                  |     |     |     |     |                                   |  |     |     |     |     |                          |                          |     |     |      |     |   |   |     |     |     |     |   |                                  |                     |     |      |     |     |                                    |  |     |      |     |     |                   |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |   |  |     |     |     |     |   |  |     |    |     |    |  |    |     |     |     |     |   |  |     |     |     |     |  |  |                           |  |  |  |  |  |                           |  |  |  |  |  |
| 122  | 130  | 122          | 130            | Petitions to the Commissioner  |                 |                 |          |          |          |          |          |     |     |     |                    |                                     |     |     |     |     |                   |  |     |     |     |     |                  |                           |     |     |      |     |                    |  |     |     |      |     |                        |  |                     |     |       |     |       |   |  |     |       |                |          |  |          |     |     |     |             |   |   |     |     |                      |     |  |  |     |              |     |              |   |                 |          |          |          |          |  |     |     |     |     |                        |                  |     |     |     |     |                                   |  |     |     |     |     |                          |                          |     |     |      |     |   |   |     |     |     |     |   |                                  |                     |     |      |     |     |                                    |  |     |      |     |     |                   |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |   |  |     |     |     |     |   |  |     |    |     |    |  |    |     |     |     |     |   |  |     |     |     |     |  |  |                           |  |  |  |  |  |                           |  |  |  |  |  |
| 123  | 50   | 123          | 50             | Petitions related to provisional applications                              |                 |                 |          |          |          |          |          |     |     |     |                    |                                     |     |     |     |     |                   |  |     |     |     |     |                  |                           |     |     |      |     |                    |  |     |     |      |     |                        |  |                     |     |       |     |       |   |  |     |       |                |          |  |          |     |     |     |             |   |   |     |     |                      |     |  |  |     |              |     |              |   |                 |          |          |          |          |  |     |     |     |     |                        |                  |     |     |     |     |                                   |  |     |     |     |     |                          |                          |     |     |      |     |   |   |     |     |     |     |   |                                  |                     |     |      |     |     |                                    |  |     |      |     |     |                   |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |   |  |     |     |     |     |   |  |     |    |     |    |  |    |     |     |     |     |   |  |     |     |     |     |  |  |                           |  |  |  |  |  |                           |  |  |  |  |  |
| 126  | 240  | 126          | 240            | Submission of Information Disclosure Stmt                                  |                 |                 |          |          |          |          |          |     |     |     |                    |                                     |     |     |     |     |                   |  |     |     |     |     |                  |                           |     |     |      |     |                    |  |     |     |      |     |                        |  |                     |     |       |     |       |   |  |     |       |                |          |  |          |     |     |     |             |   |   |     |     |                      |     |  |  |     |              |     |              |   |                 |          |          |          |          |  |     |     |     |     |                        |                  |     |     |     |     |                                   |  |     |     |     |     |                          |                          |     |     |      |     |   |   |     |     |     |     |   |                                  |                     |     |      |     |     |                                    |  |     |      |     |     |                   |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |   |  |     |     |     |     |   |  |     |    |     |    |  |    |     |     |     |     |   |  |     |     |     |     |  |  |                           |  |  |  |  |  |                           |  |  |  |  |  |
| 581  | 40   | 581          | 40             | Recording each patent assignment per property (times number of properties) | 40              |                 |          |          |          |          |          |     |     |     |                    |                                     |     |     |     |     |                   |  |     |     |     |     |                  |                           |     |     |      |     |                    |  |     |     |      |     |                        |  |                     |     |       |     |       |   |  |     |       |                |          |  |          |     |     |     |             |   |   |     |     |                      |     |  |  |     |              |     |              |   |                 |          |          |          |          |  |     |     |     |     |                        |                  |     |     |     |     |                                   |  |     |     |     |     |                          |                          |     |     |      |     |   |   |     |     |     |     |   |                                  |                     |     |      |     |     |                                    |  |     |      |     |     |                   |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |   |  |     |     |     |     |   |  |     |    |     |    |  |    |     |     |     |     |   |  |     |     |     |     |  |  |                           |  |  |  |  |  |                           |  |  |  |  |  |
| 146  | 710  | 246          | 355            | Filing a submission after final rejection (37 CFR 1.129(a))                |                 |                 |          |          |          |          |          |     |     |     |                    |                                     |     |     |     |     |                   |  |     |     |     |     |                  |                           |     |     |      |     |                    |  |     |     |      |     |                        |  |                     |     |       |     |       |   |  |     |       |                |          |  |          |     |     |     |             |   |   |     |     |                      |     |  |  |     |              |     |              |   |                 |          |          |          |          |  |     |     |     |     |                        |                  |     |     |     |     |                                   |  |     |     |     |     |                          |                          |     |     |      |     |   |   |     |     |     |     |   |                                  |                     |     |      |     |     |                                    |  |     |      |     |     |                   |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |   |  |     |     |     |     |   |  |     |    |     |    |  |    |     |     |     |     |   |  |     |     |     |     |  |  |                           |  |  |  |  |  |                           |  |  |  |  |  |
| 149  | 710  | 249          | 355            | For each additional invention to be examined (37 CFR 1.129(b))             |                 |                 |          |          |          |          |          |     |     |     |                    |                                     |     |     |     |     |                   |  |     |     |     |     |                  |                           |     |     |      |     |                    |  |     |     |      |     |                        |  |                     |     |       |     |       |   |  |     |       |                |          |  |          |     |     |     |             |   |   |     |     |                      |     |  |  |     |              |     |              |   |                 |          |          |          |          |  |     |     |     |     |                        |                  |     |     |     |     |                                   |  |     |     |     |     |                          |                          |     |     |      |     |   |   |     |     |     |     |   |                                  |                     |     |      |     |     |                                    |  |     |      |     |     |                   |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |   |  |     |     |     |     |   |  |     |    |     |    |  |    |     |     |     |     |   |  |     |     |     |     |  |  |                           |  |  |  |  |  |                           |  |  |  |  |  |
| Other fee (specify) _____  |  |              |                |  |                 |                 |          |          |          |          |          |     |     |     |                    |                                     |     |     |     |     |                   |  |     |     |     |     |                  |                           |     |     |      |     |                    |  |     |     |      |     |                        |  |                     |     |       |     |       |   |  |     |       |                |          |  |          |     |     |     |             |   |   |     |     |                      |     |  |  |     |              |     |              |   |                 |          |          |          |          |  |     |     |     |     |                        |                  |     |     |     |     |                                   |  |     |     |     |     |                          |                          |     |     |      |     |   |   |     |     |     |     |   |                                  |                     |     |      |     |     |                                    |  |     |      |     |     |                   |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |   |  |     |     |     |     |   |  |     |    |     |    |  |    |     |     |     |     |   |  |     |     |     |     |  |  |                           |  |  |  |  |  |                           |  |  |  |  |  |
| Other fee (specify) _____  |  |              |                |  |                 |                 |          |          |          |          |          |     |     |     |                    |                                     |     |     |     |     |                   |  |     |     |     |     |                  |                           |     |     |      |     |                    |  |     |     |      |     |                        |  |                     |     |       |     |       |   |  |     |       |                |          |  |          |     |     |     |             |   |   |     |     |                      |     |  |  |     |              |     |              |   |                 |          |          |          |          |  |     |     |     |     |                        |                  |     |     |     |     |                                   |  |     |     |     |     |                          |                          |     |     |      |     |   |   |     |     |     |     |   |                                  |                     |     |      |     |     |                                    |  |     |      |     |     |                   |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |   |  |     |     |     |     |   |  |     |    |     |    |  |    |     |     |     |     |   |  |     |     |     |     |  |  |                           |  |  |  |  |  |                           |  |  |  |  |  |
| <h3>1. FILING FEE</h3> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2">Large Entity</th> <th colspan="2">Small Entity</th> <th rowspan="2">Fee Description</th> <th rowspan="2">Fee Paid</th> </tr> <tr> <th>Fee Code</th> <th>Fee (\$)</th> <th>Fee Code</th> <th>Fee (\$)</th> </tr> </thead> <tbody> <tr><td>101</td><td>710</td><td>201</td><td>355</td><td>Utility filing fee</td><td>355</td></tr> <tr><td>106</td><td>320</td><td>206</td><td>160</td><td>Design filing fee</td><td></td></tr> <tr><td>107</td><td>490</td><td>207</td><td>245</td><td>Plant filing fee</td><td></td></tr> <tr><td>108</td><td>710</td><td>208</td><td>355</td><td>Reissue filing fee</td><td></td></tr> <tr><td>114</td><td>150</td><td>214</td><td>75</td><td>Provisional filing fee</td><td></td></tr> <tr><td colspan="5"><b>SUBTOTAL (1)</b></td><td>355</td></tr> </tbody> </table> <h3>2. CLAIMS</h3> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2"></th> <th>Extra</th> <th>Fee from below</th> <th>Fee Paid</th> </tr> </thead> <tbody> <tr> <td>Total Claims</td> <td>20 -20 =</td> <td>0</td> <td>9</td> <td>0</td> </tr> <tr> <td>Ind. Claims</td> <td>2 -3 =</td> <td>0</td> <td></td> <td>0</td> </tr> <tr> <td>Multiple Dep. Claims</td> <td></td> <td>0</td> <td></td> <td>0</td> </tr> </tbody> </table> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2">Large Entity</th> <th colspan="2">Small Entity</th> <th rowspan="2">Fee Description</th> <th rowspan="2">Fee Paid</th> </tr> <tr> <th>Fee Code</th> <th>Fee (\$)</th> <th>Fee Code</th> <th>Fee (\$)</th> </tr> </thead> <tbody> <tr><td>103</td><td>18</td><td>203</td><td>9</td><td>Claims in excess of 20</td><td></td></tr> <tr><td>102</td><td>80</td><td>202</td><td>40</td><td>Independent claims in excess of 3</td><td></td></tr> <tr><td>104</td><td>270</td><td>204</td><td>135</td><td>Multiple dependent claim</td><td></td></tr> <tr><td>109</td><td>80</td><td>209</td><td>40</td><td>Reissue independent claims over original patent</td><td></td></tr> <tr><td>110</td><td>18</td><td>210</td><td>9</td><td>Reissue claims in excess of 20 and over original patent</td><td></td></tr> <tr><td colspan="5"><b>SUBTOTAL (2)</b></td><td></td></tr> </tbody> </table> | Large Entity   |              | Small Entity   |  | Fee Description | Fee Paid        | Fee Code | Fee (\$) | Fee Code | Fee (\$) | 101      | 710 | 201 | 355 | Utility filing fee | 355                                 | 106 | 320 | 206 | 160 | Design filing fee |  | 107 | 490 | 207 | 245 | Plant filing fee |                           | 108 | 710 | 208  | 355 | Reissue filing fee |  | 114 | 150 | 214  | 75  | Provisional filing fee |  | <b>SUBTOTAL (1)</b> |     |       |     |       | 355   |  |     | Extra | Fee from below | Fee Paid | Total Claims                           | 20 -20 = | 0   | 9   | 0   | Ind. Claims | 2 -3 =                                  | 0 |     | 0   | Multiple Dep. Claims |     | 0                                      |  | 0   | Large Entity |     | Small Entity |   | Fee Description | Fee Paid | Fee Code | Fee (\$) | Fee Code | Fee (\$)                               | 103 | 18  | 203 | 9   | Claims in excess of 20 |                  | 102 | 80  | 202 | 40  | Independent claims in excess of 3 |  | 104 | 270 | 204 | 135 | Multiple dependent claim |                          | 109 | 80  | 209  | 40  | Reissue independent claims over original patent |   | 110 | 18  | 210 | 9   | Reissue claims in excess of 20 and over original patent |                                  | <b>SUBTOTAL (2)</b> |     |      |     |     |                                    | <p>*Reduced by Basic Filing Fee</p> <p><b>SUBTOTAL (3)</b> <span style="float: right;">40</span></p> |     |      |     |     |                   |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |   |  |     |     |     |     |   |  |     |    |     |    |  |    |     |     |     |     |   |  |     |     |     |     |  |  |                           |  |  |  |  |  |                           |  |  |  |  |  |
| Large Entity   |  | Small Entity |                | Fee Description  |                 |                 | Fee Paid |          |          |          |          |     |     |     |                    |                                     |     |     |     |     |                   |  |     |     |     |     |                  |                           |     |     |      |     |                    |  |     |     |      |     |                        |  |                     |     |       |     |       |   |  |     |       |                |          |  |          |     |     |     |             |   |   |     |     |                      |     |  |  |     |              |     |              |   |                 |          |          |          |          |  |     |     |     |     |                        |                  |     |     |     |     |                                   |  |     |     |     |     |                          |                          |     |     |      |     |   |   |     |     |     |     |   |                                  |                     |     |      |     |     |                                    |  |     |      |     |     |                   |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |   |  |     |     |     |     |   |  |     |    |     |    |  |    |     |     |     |     |   |  |     |     |     |     |  |  |                           |  |  |  |  |  |                           |  |  |  |  |  |
| Fee Code   | Fee (\$)   | Fee Code     | Fee (\$)       |  |                 |                 |          |          |          |          |          |     |     |     |                    |                                     |     |     |     |     |                   |  |     |     |     |     |                  |                           |     |     |      |     |                    |  |     |     |      |     |                        |  |                     |     |       |     |       |   |  |     |       |                |          |  |          |     |     |     |             |   |   |     |     |                      |     |  |  |     |              |     |              |   |                 |          |          |          |          |  |     |     |     |     |                        |                  |     |     |     |     |                                   |  |     |     |     |     |                          |                          |     |     |      |     |   |   |     |     |     |     |   |                                  |                     |     |      |     |     |                                    |  |     |      |     |     |                   |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |   |  |     |     |     |     |   |  |     |    |     |    |  |    |     |     |     |     |   |  |     |     |     |     |  |  |                           |  |  |  |  |  |                           |  |  |  |  |  |
| 101  | 710  | 201          | 355            | Utility filing fee   | 355             |                 |          |          |          |          |          |     |     |     |                    |                                     |     |     |     |     |                   |  |     |     |     |     |                  |                           |     |     |      |     |                    |  |     |     |      |     |                        |  |                     |     |       |     |       |   |  |     |       |                |          |  |          |     |     |     |             |   |   |     |     |                      |     |  |  |     |              |     |              |   |                 |          |          |          |          |  |     |     |     |     |                        |                  |     |     |     |     |                                   |  |     |     |     |     |                          |                          |     |     |      |     |   |   |     |     |     |     |   |                                  |                     |     |      |     |     |                                    |  |     |      |     |     |                   |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |   |  |     |     |     |     |   |  |     |    |     |    |  |    |     |     |     |     |   |  |     |     |     |     |  |  |                           |  |  |  |  |  |                           |  |  |  |  |  |
| 106  | 320  | 206          | 160            | Design filing fee  |                 |                 |          |          |          |          |          |     |     |     |                    |                                     |     |     |     |     |                   |  |     |     |     |     |                  |                           |     |     |      |     |                    |  |     |     |      |     |                        |  |                     |     |       |     |       |   |  |     |       |                |          |  |          |     |     |     |             |   |   |     |     |                      |     |  |  |     |              |     |              |   |                 |          |          |          |          |  |     |     |     |     |                        |                  |     |     |     |     |                                   |  |     |     |     |     |                          |                          |     |     |      |     |   |   |     |     |     |     |   |                                  |                     |     |      |     |     |                                    |  |     |      |     |     |                   |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |   |  |     |     |     |     |   |  |     |    |     |    |  |    |     |     |     |     |   |  |     |     |     |     |  |  |                           |  |  |  |  |  |                           |  |  |  |  |  |
| 107  | 490  | 207          | 245            | Plant filing fee   |                 |                 |          |          |          |          |          |     |     |     |                    |                                     |     |     |     |     |                   |  |     |     |     |     |                  |                           |     |     |      |     |                    |  |     |     |      |     |                        |  |                     |     |       |     |       |   |  |     |       |                |          |  |          |     |     |     |             |   |   |     |     |                      |     |  |  |     |              |     |              |   |                 |          |          |          |          |  |     |     |     |     |                        |                  |     |     |     |     |                                   |  |     |     |     |     |                          |                          |     |     |      |     |   |   |     |     |     |     |   |                                  |                     |     |      |     |     |                                    |  |     |      |     |     |                   |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |   |  |     |     |     |     |   |  |     |    |     |    |  |    |     |     |     |     |   |  |     |     |     |     |  |  |                           |  |  |  |  |  |                           |  |  |  |  |  |
| 108  | 710  | 208          | 355            | Reissue filing fee   |                 |                 |          |          |          |          |          |     |     |     |                    |                                     |     |     |     |     |                   |  |     |     |     |     |                  |                           |     |     |      |     |                    |  |     |     |      |     |                        |  |                     |     |       |     |       |   |  |     |       |                |          |  |          |     |     |     |             |   |   |     |     |                      |     |  |  |     |              |     |              |   |                 |          |          |          |          |  |     |     |     |     |                        |                  |     |     |     |     |                                   |  |     |     |     |     |                          |                          |     |     |      |     |   |   |     |     |     |     |   |                                  |                     |     |      |     |     |                                    |  |     |      |     |     |                   |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |   |  |     |     |     |     |   |  |     |    |     |    |  |    |     |     |     |     |   |  |     |     |     |     |  |  |                           |  |  |  |  |  |                           |  |  |  |  |  |
| 114  | 150  | 214          | 75             | Provisional filing fee   |                 |                 |          |          |          |          |          |     |     |     |                    |                                     |     |     |     |     |                   |  |     |     |     |     |                  |                           |     |     |      |     |                    |  |     |     |      |     |                        |  |                     |     |       |     |       |   |  |     |       |                |          |  |          |     |     |     |             |   |   |     |     |                      |     |  |  |     |              |     |              |   |                 |          |          |          |          |  |     |     |     |     |                        |                  |     |     |     |     |                                   |  |     |     |     |     |                          |                          |     |     |      |     |   |   |     |     |     |     |   |                                  |                     |     |      |     |     |                                    |  |     |      |     |     |                   |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |   |  |     |     |     |     |   |  |     |    |     |    |  |    |     |     |     |     |   |  |     |     |     |     |  |  |                           |  |  |  |  |  |                           |  |  |  |  |  |
| <b>SUBTOTAL (1)</b>  |  |              |                |  | 355             |                 |          |          |          |          |          |     |     |     |                    |                                     |     |     |     |     |                   |  |     |     |     |     |                  |                           |     |     |      |     |                    |  |     |     |      |     |                        |  |                     |     |       |     |       |   |  |     |       |                |          |  |          |     |     |     |             |   |   |     |     |                      |     |  |  |     |              |     |              |   |                 |          |          |          |          |  |     |     |     |     |                        |                  |     |     |     |     |                                   |  |     |     |     |     |                          |                          |     |     |      |     |   |   |     |     |     |     |   |                                  |                     |     |      |     |     |                                    |  |     |      |     |     |                   |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |   |  |     |     |     |     |   |  |     |    |     |    |  |    |     |     |     |     |   |  |     |     |     |     |  |  |                           |  |  |  |  |  |                           |  |  |  |  |  |
|  |  | Extra        | Fee from below | Fee Paid   |                 |                 |          |          |          |          |          |     |     |     |                    |                                     |     |     |     |     |                   |  |     |     |     |     |                  |                           |     |     |      |     |                    |  |     |     |      |     |                        |  |                     |     |       |     |       |   |  |     |       |                |          |  |          |     |     |     |             |   |   |     |     |                      |     |  |  |     |              |     |              |   |                 |          |          |          |          |  |     |     |     |     |                        |                  |     |     |     |     |                                   |  |     |     |     |     |                          |                          |     |     |      |     |   |   |     |     |     |     |   |                                  |                     |     |      |     |     |                                    |  |     |      |     |     |                   |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |   |  |     |     |     |     |   |  |     |    |     |    |  |    |     |     |     |     |   |  |     |     |     |     |  |  |                           |  |  |  |  |  |                           |  |  |  |  |  |
| Total Claims   | 20 -20 =   | 0            | 9              | 0  |                 |                 |          |          |          |          |          |     |     |     |                    |                                     |     |     |     |     |                   |  |     |     |     |     |                  |                           |     |     |      |     |                    |  |     |     |      |     |                        |  |                     |     |       |     |       |   |  |     |       |                |          |  |          |     |     |     |             |   |   |     |     |                      |     |  |  |     |              |     |              |   |                 |          |          |          |          |  |     |     |     |     |                        |                  |     |     |     |     |                                   |  |     |     |     |     |                          |                          |     |     |      |     |   |   |     |     |     |     |   |                                  |                     |     |      |     |     |                                    |  |     |      |     |     |                   |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |   |  |     |     |     |     |   |  |     |    |     |    |  |    |     |     |     |     |   |  |     |     |     |     |  |  |                           |  |  |  |  |  |                           |  |  |  |  |  |
| Ind. Claims  | 2 -3 =   | 0            |                | 0  |                 |                 |          |          |          |          |          |     |     |     |                    |                                     |     |     |     |     |                   |  |     |     |     |     |                  |                           |     |     |      |     |                    |  |     |     |      |     |                        |  |                     |     |       |     |       |   |  |     |       |                |          |  |          |     |     |     |             |   |   |     |     |                      |     |  |  |     |              |     |              |   |                 |          |          |          |          |  |     |     |     |     |                        |                  |     |     |     |     |                                   |  |     |     |     |     |                          |                          |     |     |      |     |   |   |     |     |     |     |   |                                  |                     |     |      |     |     |                                    |  |     |      |     |     |                   |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |   |  |     |     |     |     |   |  |     |    |     |    |  |    |     |     |     |     |   |  |     |     |     |     |  |  |                           |  |  |  |  |  |                           |  |  |  |  |  |
| Multiple Dep. Claims   |  | 0            |                | 0  |                 |                 |          |          |          |          |          |     |     |     |                    |                                     |     |     |     |     |                   |  |     |     |     |     |                  |                           |     |     |      |     |                    |  |     |     |      |     |                        |  |                     |     |       |     |       |   |  |     |       |                |          |  |          |     |     |     |             |   |   |     |     |                      |     |  |  |     |              |     |              |   |                 |          |          |          |          |  |     |     |     |     |                        |                  |     |     |     |     |                                   |  |     |     |     |     |                          |                          |     |     |      |     |   |   |     |     |     |     |   |                                  |                     |     |      |     |     |                                    |  |     |      |     |     |                   |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |   |  |     |     |     |     |   |  |     |    |     |    |  |    |     |     |     |     |   |  |     |     |     |     |  |  |                           |  |  |  |  |  |                           |  |  |  |  |  |
| Large Entity   |  | Small Entity |                | Fee Description  | Fee Paid        |                 |          |          |          |          |          |     |     |     |                    |                                     |     |     |     |     |                   |  |     |     |     |     |                  |                           |     |     |      |     |                    |  |     |     |      |     |                        |  |                     |     |       |     |       |   |  |     |       |                |          |  |          |     |     |     |             |   |   |     |     |                      |     |  |  |     |              |     |              |   |                 |          |          |          |          |  |     |     |     |     |                        |                  |     |     |     |     |                                   |  |     |     |     |     |                          |                          |     |     |      |     |   |   |     |     |     |     |   |                                  |                     |     |      |     |     |                                    |  |     |      |     |     |                   |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |   |  |     |     |     |     |   |  |     |    |     |    |  |    |     |     |     |     |   |  |     |     |     |     |  |  |                           |  |  |  |  |  |                           |  |  |  |  |  |
| Fee Code   | Fee (\$)   | Fee Code     | Fee (\$)       |  |                 |                 |          |          |          |          |          |     |     |     |                    |                                     |     |     |     |     |                   |  |     |     |     |     |                  |                           |     |     |      |     |                    |  |     |     |      |     |                        |  |                     |     |       |     |       |   |  |     |       |                |          |  |          |     |     |     |             |   |   |     |     |                      |     |  |  |     |              |     |              |   |                 |          |          |          |          |  |     |     |     |     |                        |                  |     |     |     |     |                                   |  |     |     |     |     |                          |                          |     |     |      |     |   |   |     |     |     |     |   |                                  |                     |     |      |     |     |                                    |  |     |      |     |     |                   |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |   |  |     |     |     |     |   |  |     |    |     |    |  |    |     |     |     |     |   |  |     |     |     |     |  |  |                           |  |  |  |  |  |                           |  |  |  |  |  |
| 103  | 18   | 203          | 9              | Claims in excess of 20   |                 |                 |          |          |          |          |          |     |     |     |                    |                                     |     |     |     |     |                   |  |     |     |     |     |                  |                           |     |     |      |     |                    |  |     |     |      |     |                        |  |                     |     |       |     |       |   |  |     |       |                |          |  |          |     |     |     |             |   |   |     |     |                      |     |  |  |     |              |     |              |   |                 |          |          |          |          |  |     |     |     |     |                        |                  |     |     |     |     |                                   |  |     |     |     |     |                          |                          |     |     |      |     |   |   |     |     |     |     |   |                                  |                     |     |      |     |     |                                    |  |     |      |     |     |                   |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |   |  |     |     |     |     |   |  |     |    |     |    |  |    |     |     |     |     |   |  |     |     |     |     |  |  |                           |  |  |  |  |  |                           |  |  |  |  |  |
| 102  | 80   | 202          | 40             | Independent claims in excess of 3  |                 |                 |          |          |          |          |          |     |     |     |                    |                                     |     |     |     |     |                   |  |     |     |     |     |                  |                           |     |     |      |     |                    |  |     |     |      |     |                        |  |                     |     |       |     |       |   |  |     |       |                |          |  |          |     |     |     |             |   |   |     |     |                      |     |  |  |     |              |     |              |   |                 |          |          |          |          |  |     |     |     |     |                        |                  |     |     |     |     |                                   |  |     |     |     |     |                          |                          |     |     |      |     |   |   |     |     |     |     |   |                                  |                     |     |      |     |     |                                    |  |     |      |     |     |                   |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |   |  |     |     |     |     |   |  |     |    |     |    |  |    |     |     |     |     |   |  |     |     |     |     |  |  |                           |  |  |  |  |  |                           |  |  |  |  |  |
| 104  | 270  | 204          | 135            | Multiple dependent claim   |                 |                 |          |          |          |          |          |     |     |     |                    |                                     |     |     |     |     |                   |  |     |     |     |     |                  |                           |     |     |      |     |                    |  |     |     |      |     |                        |  |                     |     |       |     |       |   |  |     |       |                |          |  |          |     |     |     |             |   |   |     |     |                      |     |  |  |     |              |     |              |   |                 |          |          |          |          |  |     |     |     |     |                        |                  |     |     |     |     |                                   |  |     |     |     |     |                          |                          |     |     |      |     |   |   |     |     |     |     |   |                                  |                     |     |      |     |     |                                    |  |     |      |     |     |                   |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |   |  |     |     |     |     |   |  |     |    |     |    |  |    |     |     |     |     |   |  |     |     |     |     |  |  |                           |  |  |  |  |  |                           |  |  |  |  |  |
| 109  | 80   | 209          | 40             | Reissue independent claims over original patent                            |                 |                 |          |          |          |          |          |     |     |     |                    |                                     |     |     |     |     |                   |  |     |     |     |     |                  |                           |     |     |      |     |                    |  |     |     |      |     |                        |  |                     |     |       |     |       |   |  |     |       |                |          |  |          |     |     |     |             |   |   |     |     |                      |     |  |  |     |              |     |              |   |                 |          |          |          |          |  |     |     |     |     |                        |                  |     |     |     |     |                                   |  |     |     |     |     |                          |                          |     |     |      |     |   |   |     |     |     |     |   |                                  |                     |     |      |     |     |                                    |  |     |      |     |     |                   |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |   |  |     |     |     |     |   |  |     |    |     |    |  |    |     |     |     |     |   |  |     |     |     |     |  |  |                           |  |  |  |  |  |                           |  |  |  |  |  |
| 110  | 18   | 210          | 9              | Reissue claims in excess of 20 and over original patent                    |                 |                 |          |          |          |          |          |     |     |     |                    |                                     |     |     |     |     |                   |  |     |     |     |     |                  |                           |     |     |      |     |                    |  |     |     |      |     |                        |  |                     |     |       |     |       |   |  |     |       |                |          |  |          |     |     |     |             |   |   |     |     |                      |     |  |  |     |              |     |              |   |                 |          |          |          |          |  |     |     |     |     |                        |                  |     |     |     |     |                                   |  |     |     |     |     |                          |                          |     |     |      |     |   |   |     |     |     |     |   |                                  |                     |     |      |     |     |                                    |  |     |      |     |     |                   |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |   |  |     |     |     |     |   |  |     |    |     |    |  |    |     |     |     |     |   |  |     |     |     |     |  |  |                           |  |  |  |  |  |                           |  |  |  |  |  |
| <b>SUBTOTAL (2)</b>  |  |              |                |  |                 |                 |          |          |          |          |          |     |     |     |                    |                                     |     |     |     |     |                   |  |     |     |     |     |                  |                           |     |     |      |     |                    |  |     |     |      |     |                        |  |                     |     |       |     |       |   |  |     |       |                |          |  |          |     |     |     |             |   |   |     |     |                      |     |  |  |     |              |     |              |   |                 |          |          |          |          |  |     |     |     |     |                        |                  |     |     |     |     |                                   |  |     |     |     |     |                          |                          |     |     |      |     |   |   |     |     |     |     |   |                                  |                     |     |      |     |     |                                    |  |     |      |     |     |                   |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |   |  |     |     |     |     |   |  |     |    |     |    |  |    |     |     |     |     |   |  |     |     |     |     |  |  |                           |  |  |  |  |  |                           |  |  |  |  |  |

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I hereby certify that this patent application in the name of John N. Hait for "FILTERED, HYPER-DENSE WAVE-DIVISION-MULTIPLEXING METHOD," together with seventeen (17) sheets of drawings; Assignment and cover sheet; Declaration, Power of Attorney and Petition; transmittal letter; fee transmittal letter; and Check No. 2643 for \$395.00, are being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 C.F.R. § 1.10 on the date indicated above in an envelope addressed to Box Patent Application, Assistant Commissioner for Patents, Washington, D.C. 20231.

Respectfully submitted,



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